

Compositions and methods of the invention provide for a controlled flow of resist into device contact (via) holes during a post-exposure, post-development hard-bake step. Resists of the invention are positive-acting and contain one or more components that are preferably substantially stable (i.e. no substantial crosslinking) during: 1) soft-bake, pre-exposure thermal treatment to remove solvent carrier of the applied resist, and 2) post-exposure, pre-development thermal treatment to promote or enhance the acid-promoted reaction in exposed regions (typically a de-blocking reaction). However, resists of the invention will crosslink during a post-development more stringent thermal treatment (thermal flow hard-bake step).